

**Supplementary Table 6:** Fold change expression of 8 genes found in the core PRC2 complex in RMS patient samples, embryonic stem cells (ESC) and mesenchymal stem cells (MSC).

ENTREZ	Gene	Patient Expression <sup>a</sup>	p-value <sup>b</sup>	MSC expression <sup>a</sup>	p-value <sup>b</sup>	ESC expression <sup>a</sup>	p-value <sup>b</sup>
121536	AEBP2	5.3776	0.0000	5.4828	0.0000	2.4435	0.0000
8726	EED	4.3133	0.0000	6.0917	0.0000	4.1455	0.0000
2145	EZH1	0.6858	0.0004	0.4254	0.0000	0.4372	0.0000
2146	EZH2	24.0304	0.0000	25.8881	0.0000	4.5150	0.0000
3720	JARID2	2.8843	0.0000	9.2065	0.0000	0.7752	0.0254
22823	PCL2	3.8823	0.0000	10.8039	0.0000	1.6674	0.0006
5931	RbAp46	1.8132	0.0000	2.2788	0.0000	1.5007	0.0000
23512	SUZ12	5.1101	0.0000	4.3381	0.0000	2.9037	0.0000

<sup>a</sup>Fold changes calculated against the median expression level of skeletal muscle samples, considered significant if above 2

<sup>b</sup>p-values from t-tests examining differential expression compared to skeletal muscle (Bonferroni adjusted p-value=0.0063)